IN THE CLAIMS

1. (previously presented) An optical device for treating an incident X-ray beam, said device comprising:

a monochromator; and

an optical element for conditioning the incident X-ray beam, the optical element including an X-ray reflective surface having a multilayer structure to produce a two-dimensional optical effect in order to adapt a beam directed towards the monochromator;

wherein said reflective surface consists of a single surface, said reflective surface being shaped according to two curvatures corresponding to two different directions.

2. (previously presented) The optical device according to claim 1, wherein said single reflective surface is of a multilayer type with a lateral gradient.

3. (previously presented) The optical device according to claim 1, wherein the single reflective surface comprises a depth gradient.

4. (previously presented) The optical device according to claim 1, wherein said reflective surface is shaped in each of the said two different directions in order to produce two respective one-dimensional effects.

5. (previously presented) The optical device according to claim 1, wherein said reflective surface has a geometry which is substantially circular in a first direction and substantially parabolic in a second direction.

6. (previously presented) The optical device according to claim 5, wherein said first direction is a saggital direction of

the optical element and the second direction is a meridional direction of the optical element.

7. (previously presented) The optical device according to claim 1, wherein said reflective surface has a substantially toroidal geometry.

8. (previously presented) The optical device according to claim 1, wherein said reflective surface has a substantially paraboloidal geometry.

9. (previously presented) The optical device according to claim 1, wherein said reflective surface has a substantially ellipsoidal geometry.

10. (Previously presented) The optical device according to claim 1, wherein said reflective surface is able to reflect rays of lines Cu-Kα or Mo-Kα.

11. (Previously presented) The optical device according to claim 1, wherein the monochromator comprises a germanium crystal, and the optical element comprises a W/Si multilayer coating with a lateral gradient.

12. (currently amended) The optical device according to claim 1, wherein the optical element of the optical device has a length of around 2 cm, said optical device being usable with a source of X-rays having a size of around ~~a few tens of~~40 microns by ~~a few tens of~~40 microns in order to produce a sample spot of around 300*300 microns.

13. (previously presented) The optical device according to claim 4, wherein a first one of the one-dimensional effects is a collimation.

14. (previously presented) The optical device according to claim 13, wherein a second one of the one-dimensional effects is a collimation or a focusing.

15. (previously presented) The optical device according to claim 1, wherein said reflective surface has a geometry defined by an open or closed curve different from a circle in a first one of the directions and substantially parabolic in a second one of the directions.

16. (previously presented) The optical device according to claim 1, wherein said reflective surface has a geometry substantially elliptical in a first one of the directions and substantially parabolic in a second one of the directions.

17. (previously presented) The optical device according to claim 1, wherein said reflecting surface has a geometry substantially parabolic in the two different directions.